



Document Name
MODBUS POINTS LIST

Unit Type
IAQ Program Version 3.2.3 & AQP 1.0.0 & Above

* Coil Address	Description	Modbus Function	R/W Status	Comments
00002	Network Occupied Input	1/5	Read/Write	0 = Unoccupied, 1=Occupied.
00003	Occupied	1	Read Only	Confirmation of Occupied Status.
00004	Alarm Active	1	Read Only	Confirmation of Alarm Status. 0 = Alarm, 1 = Normal.
00005	Air Flow	1	Read Only	Confirmation of Air Flow. 0 = No Flow, 1 = Flow.
00006	Supply Fan	1	Read Only	Confirmation of Supply Fan, 0 = Off, 1 = On.
00007	Exhaust Fan	1	Read Only	Confirmation of Exhaust Fan, 0 = Off, 1 = On.
00008	Wheel Motor	1	Read Only	Confirmation of Wheel Motor, 0 = Off, 1 = On.
00009	Compressor #1	1	Read Only	Confirmation of Compressor #1, 0 = Off, 1 = On.
00010	Compressor #2	1	Read Only	Confirmation of Compressor #2, 0 = Off, 1 = On.
00011	Compressor #3	1	Read Only	Confirmation of Compressor #3, 0 = Off, 1 = On.
00012	Compressor #4	1	Read Only	Confirmation of Compressor #4, 0 = Off, 1 = On.
00013	Condenser Fan #1	1	Read Only	Confirmation of Condenser Fan #1, 0 = Off, 1 = On.
00014	Condenser Fan #2	1	Read Only	Confirmation of Condenser Fan #2, 0 = Off, 1 = On.
00015	Condenser Fan #3	1	Read Only	Confirmation of Condenser Fan #3, 0 = Off, 1 = On.
00016	Condenser Fan #4	1	Read Only	Confirmation of Condenser Fan #4, 0 = Off, 1 = On.
00017	Remote Reset	1/5	Read/Write	Write 1 to Reset. 0 is set after a program scan.

* Holding Register Address	Description	Modbus Function	R/W Status	Comments
00002	Suction Pressure	3	Read Only	In Tenths, linear from 0 to 250 psig.
00003	Discharge Pressure	3	Read Only	In Tenths, linear from 0 to 650 psig.
00004	Intake Air Relative Humidity	3	Read Only	In Tenths, linear from 0 to 100 %.
00005	Intake Air Temperature	3	Read Only	In Tenths, linear from -42°F to 137°F.
00006	Intake Air Dewpoint	3	Read Only	In Tenths, calculated value in °F.
00007	Supply Air Temperature	3	Read Only	In Tenths, linear from -58 to 212 °F.
00008	Zone Air Temperature	3	Read Only	In Tenths, linear from -58 to 212 °F.
00009	Zone Air Relative Humidity	3	Read Only	In Tenths, linear from 0 to 100 %.
00010	Suction Press Circuit B	3	Read Only	In Tenths, linear from 0 to 250 psig.
00011	Discharge Press Circuit B	3	Read Only	In Tenths, linear from 0 to 650 psig.
00012	Supply Fan Speed Command	3	Read Only	In Tenths, linear from 0 to 100 %.
00013	Auxiliary Heating Command	3	Read Only	In Tenths, linear from 0 to 100 %.



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* Holding Register Address	Description	Modbus Function	R/W Status	Comments
00014	Exhaust Fan Speed Comm.	3	Read Only	In Tenths, linear from 0 to 100 %.
00015	Wheel Speed Comm.	3	Read Only	In Tenths, linear from 0 to 100 %.
00016	Outside Air Damper Comm.	3	Read Only	In Tenths, linear from 0 to 100 %.
00017	Recirc. Damper Command	3	Read Only	In Tenths, linear from 0 to 100 %.
00018	Outside Air Relative Humidity	3	Read Only	In Tenths, linear from 0 to 100 %.
00019	Outside Air Temperature	3	Read Only	In Tenths, linear from -42°F to 137°F.
00020	Return Air Relative Humidity	3	Read Only	In Tenths, linear from 0 to 100 %.
00021	Return Air Temperature	3	Read Only	In Tenths, linear from -42°F to 137°F.
00022	Supply Air Setpoint	3/6	Read/Write	In Tenths, settable from 45.0 to 99.9 °F.
00023	Zone Air Setpoint	3/6	Read/Write	In Tenths, settable from 55.0 to 95.0 °F.

* Holding Register Address	Description	Modbus Function	R/W Status	Comments
00210	Unit Status	3	Read Only	Unit Status. See Table 1 at end of list.
00211	CO2 In Zone	3	Read Only	0 to 2000 ppm.
00212	CO2 Outside	3	Read Only	0 to 2000 ppm.
00213	CO2 Differential	3	Read Only	CO2 In Zone minus CO2 Outside, 0 to 2000 ppm.
00214	Heat Wheel Supply Pressure	3	Read Only	Inches of water column, in thousandths. 1452 = 1.452 "wc
00215	Heat Wheel Exhaust Pressure	3	Read Only	Inches of water column, in thousandths.
00216	Air Flow Differential Pressure	3	Read Only	Inches of water column, in thousandths.
00217	Alarm Code	3	Read Only	Alarm code. See Table 2 at end of list.

* All coil and holding register addresses are in PLC style base 1 notation. If base 0 notation is required, subtract 1 from the address number.



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CODE	STATUS DESCRIPTION
0	Unit Satisfied / Unit Off
1	Heating Required
2	Cooling Required
3	Dehumidification Required
4	Dehum and Heating Required
5	Dehum and Cooling Required
6	Low Suction Pressure Condition
7	EXV Initialization
8	Damper Opening
9	High Discharge Pressure Limiting
10	Pump Down Required
11	Compressor Switched Off
12	Variable Speed Comp. Limiting

Table 1

CODE	ALARM DESCRIPTION
1	Low Suction Pressure
2	Motor Overloads
3	High Discharge Pressure A
4	High Discharge Pressure B
5	Multiple Low Pressure A
6	Multiple Low Pressure B
7	Temperature Sensor Fault
8	pAD Network Fault
9	SAT Out of Range
10	Air Filter Clogged
11	Low Voltage Fault
12	High Condensate Level
13	Low Water Flow
14	Smoke Alarm
15	Low Air Flow
16	Freeze 'Stat Alarm
17	Condenser Overload Alarm
18	ModBus Comm. Fault
19	High Refr. Discharge Temperature
20	High Super Heat
21	Low Oil Level Alarm
22	Fixed Speed Comp. Phase Fault

Table 2

Revision (Rev.) History				
Rev.	Description	Date	Initials	ECN #
00	Initial Release	5/6/2010	MTW	1630
01	Added FREEZE 'STAT Alarm	4/21/2011	MTW	1697
02	Added Table 1 for Unit Status	7/21/2014	MTW	2368
03	Revised for external wheel module, version 3.2.0	1/16/2015	MTW	2442
04	Revised Tables 1 & 2 for release of Aura Q-Pump Inverter Plus	4/30/2015	MTW	2485